OIPE

```
          RAW SEQUENCE LISTING                    DATE: 06/06/2002
          PATENT APPLICATION:  US/10/047,542      TIME: 10:42:30

          Input Set : A:\03090504.app
          Output Set: N:\CRF3\06062002\J047542.raw      p.6
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 3 <110> APPLICANT: LARRICK, JAMES W.
 4        WYCOFF, KEITH L.
 6 <120> TITLE OF INVENTION: NOVEL IMMUNOADHESINS FOR TREATING AND PREVENTING VIRAL
 7        AND BACTERIAL DISEASES
 9 <130> FILE REFERENCE: 030905.0004.CIP1
11 <140> CURRENT APPLICATION NUMBER: US 10/047,542
12 <141> CURRENT FILING DATE: 2001-10-26
14 <150> PRIOR APPLICATION NUMBER: PCT/US01/13932
15 <151> PRIOR FILING DATE: 2001-04-28
17 <150> PRIOR APPLICATION NUMBER: 60/200,298
18 <151> PRIOR FILING DATE: 2000-04-28
20 <160> NUMBER OF SEQ ID NOS: 101
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 1596
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 1
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32 ggaggctccg tgctggtgac atgcagcacc tcctgtgacc agccaagtt gttgggcata 180
33 gagaccccgt tgcctaaaaa ggagttgctc ctgcctggga acaaccgaa ggtgtatgaa 240
34 ctgagcaatg tgcaagaaga tagccaacca atgtgctatt caaactgccc tgatgggcag 300
35 tcaacagcta aaaccttcct caccgtgtac tggactccag aacgggtgga actggcaccc 360
36 ctccctctt ggcagccagt gggcaagaac cttaccctac gctgccaggt ggaggtgagg 420
37 gcaccccggg ccaacctcac cgtggtgctg ctccgtgggg agaaggagct gaaacgggag 480
38 ccagctgtgg gggagccccgc tgaggtcacg accacggtgc tggtgaggag agatcaccat 540
39 ggagccaatt tctcgtgccg cactgaactg gacctgcggc cccaaggct ggagctgttt 600
40 gagaacacct cggccccccta ccagtccag acctttgtcc tgccagcgac tcccccacaa 660
41 cttgtcagcc cccgggtcct agaggtggac acgcaggga ccgtggtctg ttccctggac 720
42 gggctgttcc cagtctcgga ggcccaggtc cacctggcac tggggacca gaggttgaac 780
43 cccacagtca cctatgcaa cgactccttc tcggccaagg cctcagtcag tgtgaccgca 840
44 gaggacgagg gcacccagcg gctgacgtgt gcagtaatac tggggaacca ggcaccagag 900
45 acactgcaga cagtgaccat ctacagcttt ccggcgccca acgtgattct gacgaagcca 960
46 gaggtctcag aagggaccga ggtgacagta aagtgtgagg cccaccctag agccaaggtg 1020
47 acgctgaatg gggttccagc ccagccactg ggcccggagg cccagctcct gctgaaggcc 1080
48 accccagagg acaacgggcg cagcttctct tgctctgcaa ccctggaggt ggccggccag 1140
49 cttatacaca agaaccagac ccgggagctt cgtgtcctgt ctggacagg actggcagg 1200
50 agggattgtc cgggaaactg gacgtggcca gaaaattccc agcagactcc aatgtgccag 1260
51 gcttggggga acccattgcc cgagctcaag tgtctaaagg atggcacttt cccactgcca 1320
52 atcgggggaat cagtgactgt cactcgagat cttgagggca cctacctctg tcgggccagg 1380
53 agcactcaag gggaggtcac ccgcaaggtg accgtgaatg tgctctcccc ccggtatgag 1440
54 attgtcatca tcactgtggt agcagcccgca gtcataatgg gcactgcagg cctcagcacg 1500
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Input Set : A:\03090504.app

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60 <211> LENGTH: 532
61 <212> TYPE: PRT
62 <213> ORGANISM: Homo sapiens
64 <400> SEQUENCE: 2
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68 Leu Gly Ala Leu Phe Pro Gly Pro Gly Asn Ala Gln Thr Ser Val Ser
69              20                  25                 30
71 Pro Ser Lys Val Ile Leu Pro Arg Gly Gly Ser Val Leu Val Thr Cys
72          35                  40                 45
74 Ser Thr Ser Cys Asp Gln Pro Lys Leu Leu Gly Ile Glu Thr Pro Leu
75      50                  55                 60
77 Pro Lys Lys Glu Leu Leu Leu Pro Gly Asn Asn Arg Lys Val Tyr Glu
78 65                  70                 75                 80
80 Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met Cys Tyr Ser Asn Cys
81              85                  90                 95
83 Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu Thr Val Tyr Trp Thr
84          100                 105                110
86 Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser Trp Gln Pro Val Gly
87          115                 120                125
89 Lys Asn Leu Thr Leu Arg Cys Gln Val Glu Gly Gly Ala Pro Arg Ala
90          130                 135                140
92 Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys Glu Leu Lys Arg Glu
93 145                 150                155                160
95 Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr Thr Val Leu Val Arg
96          165                 170                175
98 Arg Asp His His Gly Ala Asn Phe Ser Cys Arg Thr Glu Leu Asp Leu
99          180                 185                190
101 Arg Pro Gln Gly Leu Glu Leu Phe Glu Asn Thr Ser Ala Pro Tyr Gln
102         195                 200                205
104 Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro Gln Leu Val Ser Pro
105         210                 215                220
107 Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val Val Cys Ser Leu Asp
108 225                 230                235                240
110 Gly Leu Phe Pro Val Ser Glu Ala Gln Val His Leu Ala Leu Gly Asp
111         245                 250                255
113 Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn Asp Ser Phe Ser Ala
114         260                 265                270
116 Lys Ala Ser Val Ser Val Thr Ala Glu Asp Glu Gly Thr Gln Arg Leu
117         275                 280                285
119 Thr Cys Ala Val Ile Leu Gly Asn Gln Ser Gln Glu Thr Leu Gln Thr
120         290                 295                300
122 Val Thr Ile Tyr Ser Phe Pro Ala Pro Asn Val Ile Leu Thr Lys Pro
123 305                 310                315                320
125 Glu Val Ser Glu Gly Thr Glu Val Thr Val Lys Cys Glu Ala His Pro
126         325                 330                335
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128 Arg Ala Lys Val Thr Leu Asn Gly Val Pro Ala Gln Pro Leu Gly Pro
129                 340                 345                 350
131 Arg Ala Gln Leu Leu Leu Lys Ala Thr Pro Glu Asp Asn Gly Arg Ser
132                 355                 360                 365
134 Phe Ser Cys Ser Ala Thr Leu Glu Val Ala Gly Gln Leu Ile His Lys
135                 370                 375                 380
137 Asn Gln Thr Arg Glu Leu Arg Val Leu Tyr Gly Pro Arg Leu Asp Glu
138 385                 390                 395                 400
140 Arg Asp Cys Pro Gly Asn Trp Thr Trp Pro Glu Asn Ser Gln Gln Thr
141                 405                 410                 415
143 Pro Met Cys Gln Ala Trp Gly Asn Pro Leu Pro Glu Leu Lys Cys Leu
144                 420                 425                 430
146 Lys Asp Gly Thr Phe Pro Leu Pro Ile Gly Glu Ser Val Thr Val Thr
147                 435                 440                 445
149 Arg Asp Leu Glu Gly Thr Tyr Leu Cys Arg Ala Arg Ser Thr Gln Gly
150 450                 455                 460
152 Glu Val Thr Arg Lys Val Thr Val Asn Val Leu Ser Pro Arg Tyr Glu
153 465                 470                 475                 480
155 Ile Val Ile Ile Thr Val Val Ala Ala Ala Val Ile Met Gly Thr Ala
156                 485                 490                 495
158 Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg Lys Ile Lys Lys Tyr
159                 500                 505                 510
161 Arg Leu Gln Gln Ala Gln Lys Gly Thr Pro Met Lys Pro Asn Thr Gln
162                 515                 520                 525
164 Ala Thr Pro Pro
165                 530
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169 <211> LENGTH: 3003
170 <212> TYPE: DNA
171 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 3
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175 tcagcctcgc tatggctccc agcagccccc agcccgcgct gcccgcactc ctggtcctgc 120
176 tcggggctct gttcccagga cctggcaatg cccagacatc tgtgtccccc tcaaaagtca 180
177 tcctgccccg gggaggctcc gtgctggtga catgcagcac ctcctgtgac cagcccaagt 240
178 tgttgggcat agagaccccg ttgcctaaaa aggagttgct cctgcctggg aacaaccgga 300
179 aggtgtatga actgagcaat gtgcaagaag atagccaacc aatgtgctat tcaaactgcc 360
180 ctgatgggca gtcaacagct aaaaccttcc tcaccgtgta ctggactcca gaacgggtgg 420
181 aactggcacc cctcccctct tggcagccag tgggcaagaa ccttacccta cgctgccagg 480
182 tggagggtgg ggcaccccgg gccaacctca ccgtggtgct gctccgtggg gagaagggcc 540
183 tgaaacggga gccagctgtg ggggagcccg ctgaggtcac gaccacggtg ctggtgagga 600
184 gagatcacca tggagccaat ttctgtgcc gcactgaact ggacctgcgg ccccaagggc 660
185 tggagctgtt tgagaacacc tcggccccct accagctcca gacctttgtc ctgcagcga 720
186 ctcccccaca acttgtcagc ccccgggtcc tagagtggca cacgcagggg accgtggtct 780
187 gttccctgga cgggctgttc ccagtctcgg aggcccaggt ccacctggca ctggggaacc 840
188 agaggttgaa cccacagtc acctatggca acgactcctt ctcggccaag gcctcagtca 900
189 gtgtgaccgc agaggacgag ggcacccagc ggctgacgtc tgcagtaata ctggggaacc 960
190 agagccagga gacactgcag acagtgacca tctacagctt tccggcgccc aacgtgattc 1020
191 tgacgaagcc agaggtctca gaagggaccg aggtgacagt gaagtgtgag gcccaccta 1080
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Input Set : A:\03090504.app
Output Set: N:\CRF3\06062002\J047542.raw

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192 gagccaaggt gacgctgaat ggggttccag cccagccact gggcccgagg gcccagctcc 1140
193 tgctgaaggc caccccagag gacaacgggc gcagcttctc ctgctctgca accctggagg 1200
194 tggccggcca gcttatacac aagaaccaga cccgggagct tcgtgtcctg tatggccccc 1260
195 gactggacga gagggattgt ccgggaaact ggacgtggcc agaaaattcc cagcagactc 1320
196 caatgtgcca ggcttggggg aacccattgc ccgagctcaa gtgtctaaag gatggcactt 1380
197 tcccactgcc catcggggaa tcagtgactg tcactcgaga tcttgagggc acctacctct 1440
198 gtcggggccag gagcactcaa ggggaggtca cccgcaaggt gaccgtgaat gtgctctccc 1500
199 cccggtatga gattgtcatc atcactgtgg tagcagccgc agtcataatg ggcactgcag 1560
200 gcctcagcac gtacctctat aaccgccagc ggaagatcaa gaaatacaga ctacaacagg 1620
201 cccaaaaagg gacccccatg aaaccgaaca cacaagccac gcctccctga acctatcccg 1680
202 ggacagggcc tcttcctcgg ccttcccata ttggtggcag tggtgccaca ctgaacagag 1740
203 tggaagacat atgccatgca gctacaccta ccggccctgg gacgccggag gacagggcat 1800
204 tgtcctcagt cagatacaac agcatttggg gccatggtac ctgcacacct aaaacactag 1860
205 gccacgcatc tgatctgtag tcacatgact aagccaagag gaaggagcaa gactcaagac 1920
206 atgattgatg gatgttaaag tctagcctga tgagaggggaa agtggtgggg gagacatagc 1980
207 cccaccatga ggacatacaa ctgggaaata ctgaaacttg ctgcctattg ggtatgctga 2040
208 gggcccacag acttacagaa gaagtggccc tccatagaca tgtgtagcat caaaacacaa 2100
209 aggcccacac ttcctgacgg atgccagctt gggcactgct gtctactgac cccaacccct 2160
210 gatgatatgt attattcat ttgttatttt accagctatt tattgagtgt cttttatgta 2220
211 ggctaaatga acataggtct ctggcctcac ggagctccca gtccatgtca cattcaaggt 2280
212 caccaggtac agttgtacag gttgtacact gcaggagagt gcctggcaaa aagatcaaat 2340
213 ggggctggga cttctcattg gccaacctgc ctttccccag aaggagtgat ttttctatcg 2400
214 gcacaaaagc actatatgga ctggtaatgg ttcacaggtt cagagattac ccagtgaggc 2460
215 cttattcctc cttcccccc aaaactgaca ccttttgttag ccacctcccc acccacatac 2520
216 atttctgcca gtgttcacaa tgacactcag cggtcatgtc tggacatgag tgcccaggga 2580
217 atatgcccaa gctatgcctt gtcctcttgt cctgtttgca tttcactggg agcttgcact 2640
218 attgcagctc cagtttcctg cagtgatcag ggtcctgcaa gcagtgggga agggggccaa 2700
219 ggtattggag gactccctcc cagctttgga agcctcatcc gcgtgtgtgt gtgtgtgtgt 2760
220 atgtgtagac aagctctcgc tctgtcaccc aggctggagt gcagtggtgc aatcatggtt 2820
221 cactgcagtc ttgacctttt gggctcaagt gatcctccca cctcagcctc ctgagtagct 2880
222 gggaccatag gctcacaaca ccacacctgg caaatttgat tttttttttt tttttcagag 2940
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224 gcc                                                              3003
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227 <210> SEQ ID NO: 4
228 <211> LENGTH: 6
229 <212> TYPE: PRT
230 <213> ORGANISM: Homo sapiens
232 <400> SEQUENCE: 4
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234   1   5

237 <210> SEQ ID NO: 5
238 <211> LENGTH: 7
239 <212> TYPE: PRT
240 <213> ORGANISM: Homo sapiens
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243 Arg Ser Glu Lys Asp Glu Leu
244   1   5

247 <210> SEQ ID NO: 6
248 <211> LENGTH: 52

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/047,542

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Input Set : A:\03090504.app
Output Set: N:\CRF3\06062002\J047542.raw

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249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Description of Artificial Sequence: Cloning primer
255 <400> SEQUENCE: 6
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260 <211> LENGTH: 38
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262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
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272 <211> LENGTH: 799
273 <212> TYPE: PRT
274 <213> ORGANISM: Homo sapiens
276 <400> SEQUENCE: 8
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278  1               5                  10                  15
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281              20                  25                  30
283 Ile Glu Thr Pro Leu Pro Lys Lys Glu Leu Leu Leu Pro Gly Asn Asn
284              35                  40                  45
286 Arg Lys Val Tyr Glu Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met
287         50                  55                  60
289 Cys Tyr Ser Asn Cys Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu
290  65                  70                  75                  80
292 Thr Val Tyr Trp Thr Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser
293                  85                  90                  95
295 Trp Gln Pro Val Gly Lys Asn Leu Thr Leu Arg Cys Gln Val Glu Gly
296                 100                 105                 110
298 Gly Ala Pro Arg Ala Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys
299         115                 120                 125
301 Glu Leu Lys Arg Glu Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr
302         130                 135                 140
304 Thr Val Leu Val Arg Arg Asp His His Gly Ala Asn Phe Ser Cys Arg
305 145                 150                 155                 160
307 Thr Glu Leu Asp Leu Arg Pro Gln Gly Leu Glu Leu Phe Glu Asn Thr
308                 165                 170                 175
310 Ser Ala Pro Tyr Gln Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro
311                 180                 185                 190
313 Gln Leu Val Ser Pro Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val
314         195                 200                 205
316 Val Cys Ser Leu Asp Gly Leu Phe Pro Val Ser Glu Ala Gln Val His
317         210                 215                 220
319 Leu Ala Leu Gly Asp Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn
320 225                 230                 235                 240
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 06/06/2002
PATENT APPLICATION: US/10/047,542   TIME: 10:42:31

Input Set : A:\03090504.app
Output Set: N:\CRF3\06062002\J047542.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 2150,2214,2215
Seq#:14; N Pos. 2315
Seq#:82; Xaa Pos. 12,77,78,79,80,145,146,147,155,156,157,158,159,160,161
Seq#:82; Xaa Pos. 162,163,268,269,279,282
Seq#:88; Xaa Pos. 12,77,78,79,80,81,132,145,146,147